

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of claims:

Claim 1 (currently amended): A semiconductor component for generating visible polychromatic light, comprising:

a semiconductor chip having a first semiconductor layer and a second semiconductor layer adjacent to said first semiconductor layer;

said second semiconductor layer including an electroluminescent region emitting visible light of a first color having a first wavelength;

said first semiconductor layer having a first band gap, said electroluminescent region having a second band gap, said first band gap being smaller than said second band gap;

said first semiconductor layer absorbing part of the visible light of the first color and said first semiconductor layer re-emitting visible light of a second color having a second wavelength, the second color being different from the first color, and the second wavelength being longer than the first wavelength;

said semiconductor chip emitting the visible light of the second color together with the visible light of the first color; and

said first semiconductor layer including states of allowed energy levels in said first band gap.

Claim 2 (cancelled).

Claim 3 (original): The semiconductor component according to claim 1, wherein:

said first semiconductor layer includes a given material with an absorption edge having an energy level corresponding to a third wavelength, the third wavelength is longer than the first wavelength of the visible light emitted by said second semiconductor layer and is shorter than the second wavelength; and

said given material, when excited with radiation of a wavelength shorter than the third wavelength, re-emits radiation of the second wavelength.

Claim 4 (original): The semiconductor component according to claim 1, wherein a substrate for epitaxially growing said second semiconductor layer is also utilized as said first semiconductor layer.

Claim 5 (original): The semiconductor component according to claim 1, wherein:

said semiconductor chip includes a growth substrate; and

said first semiconductor layer is disposed between said growth substrate and said second semiconductor layer.

Claim 6 (original): The semiconductor component according to claim 1, wherein:

said semiconductor chip includes a growth substrate for epitaxially growing said second semiconductor layer; and

said second semiconductor layer has a side opposite said growth substrate, said first semiconductor layer is disposed on said side of said second semiconductor layer opposite said growth substrate.

Claim 7 (original): The semiconductor component according to claim 1, wherein:

said first semiconductor layer includes doped ZnSe; and

said second semiconductor layer has an active zone containing $\text{Cd}_x\text{Zn}_{1-x}\text{Se}/\text{ZnSe}$ with $0 \leq x \leq 1$.

Claim 8 (original): The semiconductor component according to claim 1, including a parabolic mirror, said semiconductor chip being disposed in said parabolic mirror.

Claim 9 (previously presented): The semiconductor component according to claim 1, wherein said first semiconductor layer and said second semiconductor layer are configured to emit white light from said semiconductor chip.